



## Department of Energy

Washington, DC 20585

Dear Interested Party:

Enclosed for your information is the Waste Isolation Pilot Plant (WIPP) Disposal Phase Final Supplemental Environmental Impact Statement (DOE/EIS-0026-S2) (SEIS-II).

The Department of Energy has prepared the SEIS-II to assess the potential environmental impacts of six alternatives for disposal of the Department's transuranic waste. The Department's preferred alternative is to dispose of defense transuranic waste packaged to meet planning basis Waste Acceptance Criteria at WIPP, near Carlsbad, New Mexico, up to current regulatory volume limits. (The WIPP Waste Acceptance Criteria require packaging to meet worker safety, transportation, and disposal requirements.) Under the preferred alternative, the Department would initially transport transuranic waste only by truck and would continue to explore the feasibility of rail transportation. The preferred alternative and other alternatives are discussed in Volume I, Chapter 3.

The Draft SEIS-II was published in November 1996, with a three-month public comment period. Approximately 4,000 comments were received from individuals and state, Federal, tribal or other stakeholder organizations. Written and oral comments on the Draft SEIS-II were considered during the preparation of the Final SEIS-II. Comments received and the Department's responses are contained in Volume III, and summarized in a text box on page S-4 of the Summary.

The Final SEIS-II includes relevant information contained in Departmental documents completed since the Draft SEIS-II. In particular, the Final SEIS-II provides more recent transuranic waste volume projections and the changes to impacts that might be expected to result from this newer information (see Volume II, Appendix J). The SEIS-II performance assessment methodology is the same as used in the final WIPP Compliance Certification Application (October 1996). The Department also has provided more detail on how the operational time periods for some of the alternatives (other than the preferred alternative) would be reduced if those alternatives were to be implemented.

The Department will issue a Record of Decision on whether and, if so, how to open WIPP for disposal no sooner than 30 days after the U.S. Environmental Protection Agency (EPA) publishes a Notice of Availability of the SEIS-II in the Federal Register. In addition to issuance of the Record of Decision (currently planned for November 1997), two other major milestones remain. First, EPA must determine whether WIPP meets standards for disposal of transuranic waste (40 CFR Part 191). The second milestone is for the New Mexico Environment



Department to approve the Department's Resource Conservation and Recovery Act permit application so that WIPP can accept transuranic mixed waste, which is transuranic waste that contains hazardous components.

If you require further information on the SEIS-II, please contact Harold Johnson, the NEPA Document Manager of the Carlsbad Area Office, at (505) 234-7349.

Sincerely,

A handwritten signature in black ink, appearing to read "Alvin L. Alm". The signature is fluid and cursive, with a large initial "A" and "L".

Alvin L. Alm  
Assistant Secretary for  
Environment Management

Enclosure

## **DOE Identifies Proposed Action as the Preferred Alternative for the WIPP SEIS-II**

### **With analysis completed, the DOE moves closer to final decision**

The U.S. Department of Energy (DOE) has moved closer to making a decision regarding the treatment, storage, and disposal of transuranic waste with the completion of the *Waste Isolation Pilot Plant Final Supplemental Environmental Impact Statement* (SEIS-II). In the Final SEIS-II, the DOE has identified the Proposed Action as the Preferred Alternative, with the additional commitment that rail would be considered as a future option for transportation.

### **Specifics of the Preferred Alternative**

Under the Preferred Alternative, the DOE would accept defense transuranic waste that meets WIPP waste acceptance criteria for disposal up to legal limits. Initially, the DOE would transport transuranic waste by truck, primarily because of the unavailability of rail service with transit times reliable enough to allow the DOE to meet Nuclear Regulatory Commission requirements. However, the DOE would continue to explore the feasibility of rail service.

Specifics of the Preferred Alternative in the Final SEIS-II include:

*Waste Type:* defense-related transuranic waste in retrievable storage and newly generated through the year 2033.

*Post-treatment volume:* a maximum of 5,950,000 cubic feet of contact-handled transuranic waste; 250,000 cubic feet of remote-handled transuranic waste.

*Operations time frame:* Beginning in 1998, the DOE would receive and emplace waste for 35 years.

In preparing the SEIS-II, the DOE asked experts to analyze the environmental impact associated with the treatment, storage, and disposal of transuranic waste, which may contain hazardous constituents, and the impact of transporting this waste to the WIPP. The Final SEIS-II analysis details the environmental impact associated with treating, temporarily storing, transporting, and disposing of transuranic wastes.

### **Why this alternative was identified**

The Preferred Alternative was identified for the following reasons:

- The Preferred Alternative enables the DOE to comply with the provisions of existing DOE agreements regarding the management of transuranic waste.
- It responds to the will of Congress, as expressed in the Land Withdrawal Act Amendments, to make the WIPP ready to accept waste as soon as health and safety standards have been met and applicable laws have been complied with.
- The Preferred Alternative reduces, to the maximum extent possible under existing law, the long-term impact of the storage of transuranic waste at current storage sites.
- This alternative is the least expensive alternative examined in the SEIS-II that disposes of transuranic waste at the WIPP.

## **Changes from the Draft SEIS-II**

Changes include the following:

- Two sites were removed – Pantex Site and Teledyne Brown Engineering – because the small amount of transuranic waste at those sites has been transferred to other DOE sites for storage.
- Information from the *Final Waste Management Programmatic Environmental Impact Statement* and other recently completed environmental analyses has been incorporated into the Final SEIS-II.
- Under the Preferred Alternative, the DOE would continue to consider rail transportation of transuranic waste. The Proposed Action considers only truck shipments.
- Volume III, a comment response document, has been added to the Final SEIS-II to address the nearly 4,000 comments received on the Draft SEIS-II.

## **Why prepare the WIPP SEIS-II?**

The DOE must dispose of transuranic waste generated by past, present, and future activities in a manner that protects public health and the environment. Under the National Environmental Policy Act, an environmental impact statement is required for proposed major federal actions that may significantly affect the quality of the human environment. The SEIS-II, the third such statement for WIPP, uses the latest data and methods to analyze the potential impact of disposing of transuranic waste at the WIPP and of closing the facility once operations end.

## **Next steps**

In previous National Environmental Policy Act documents and in the SEIS-II, the DOE examined alternatives to disposal at the WIPP. Based on the Final SEIS-II, the DOE will issue a Record of Decision concerning whether to begin disposal operations at this underground facility, and if so, the required level of treatment and the mode of transportation.

## **Need more information?**

For more information about the WIPP or the Final SEIS-II and related documents, or to be placed on the mailing list, call the WIPP Information Center at 1-800-336-WIPP (1-800-336-9477).

You may also visit the National Transuranic Waste Program Home Page at <http://www.wipp.carlsbad.nm.us>.  
If you prefer, write:

Ms. Patricia Kilgore  
U.S. Department of Energy  
Carlsbad Area Office  
P.O. Box 3090  
Carlsbad, New Mexico 88221

## Transportation of Transuranic Waste to the Waste Isolation Pilot Plant under Preferred Alternative

Under the Preferred Alternative for the *Waste Isolation Pilot Plant Disposal Phase Final Supplemental Environmental Impact Statement* (SEIS-II), trucks would transport contact-handled transuranic waste to the Waste Isolation Pilot Plant (WIPP) site in Nuclear Regulatory Commission (NRC)-approved containers called TRUPACT-IIs. Remote-handled transuranic waste would be transported by truck in containers called RH-72B casks, which are currently awaiting NRC certification. The trucks would travel from the transuranic waste sites to the WIPP over routes designated by the U.S. Department of Transportation and the states.

During the 35-year disposal phase, more than 29,000 shipments of contact-handled and almost 9,000 shipments of remote-handled transuranic waste are expected to arrive at the WIPP. They would arrive at an average rate of about 50 contact-handled transuranic waste shipments per week when the repository is in full operation, and an average of about eight shipments of remote-handled transuranic waste per week.

Each truck carrying contact-handled transuranic waste would carry as many as three TRUPACT-IIs, for a total load of up to forty-two 55-gallon drums or six standard waste boxes. A truck transporting remote-handled waste would carry a single canister containing up to three 55-gallon drums.

### Safety Strategies

The environmental impacts of transporting transuranic waste, both from traffic accidents (regardless of cargo carried) and from exposure to radioactivity, are discussed at length in the Final SEIS-II.

The U.S. Department of Energy (DOE) is already implementing many strategies to ensure safe shipments, including:

- **Robust Shipping Containers:** The NRC-approved TRUPACT-II container consists of separate outer and inner containment vessels made of stainless steel. Three TRUPACT-IIs remained leak tight following a series of rigorous tests used for NRC approval. Tests include a 30-foot free drop onto an unyielding surface, a 40-inch free drop onto a vertical steel bar, exposure to engulfing fires, and immersion in water. The RH-72B canister for remote-handled waste, which the NRC is evaluating for certification, will undergo equally rigorous tests.
- **Stringent Driver Qualifications:** Drivers must pass strict traffic safety and emergency response exams, maintain good driving records, and renew their certifications every year. Each shipment will have two drivers, who are required to perform mechanical inspections every two hours or every 100 miles during a shipment.
- **Emergency Response Training:** To date, the DOE has trained emergency response professionals in 12 states. The DOE works through the Western Governors' Association and the Southern States Energy Board to help ensure that emergency responders and emergency medical technicians along the route are trained to handle any incident involving transuranic waste.

- **Advanced Communications Technology:** The Transportation Tracking and Communications Systems (TRANSCOM) uses communications equipment and multiple satellites to track the status and position of shipments anywhere in the United States. TRANSCOM also maintains information about schedules, routes, shipment progress, and the types of materials being transported, as well as weather conditions and emergency response information.
- **Waste Acceptance Criteria:** Before being shipped to the WIPP, all waste must be characterized according to strict criteria. Wastes that do not meet the criteria are prohibited from being shipped on the highways.
- **Advance Notification:** The Department's Carlsbad Area Office will provide a shipment schedule to affected states and tribes each year, with a mid-year update. These notifications will facilitate responding to any emergencies, implementing procedures for bad weather and road conditions, selecting safe parking when needed, scheduling inspections, and conducting public information programs.

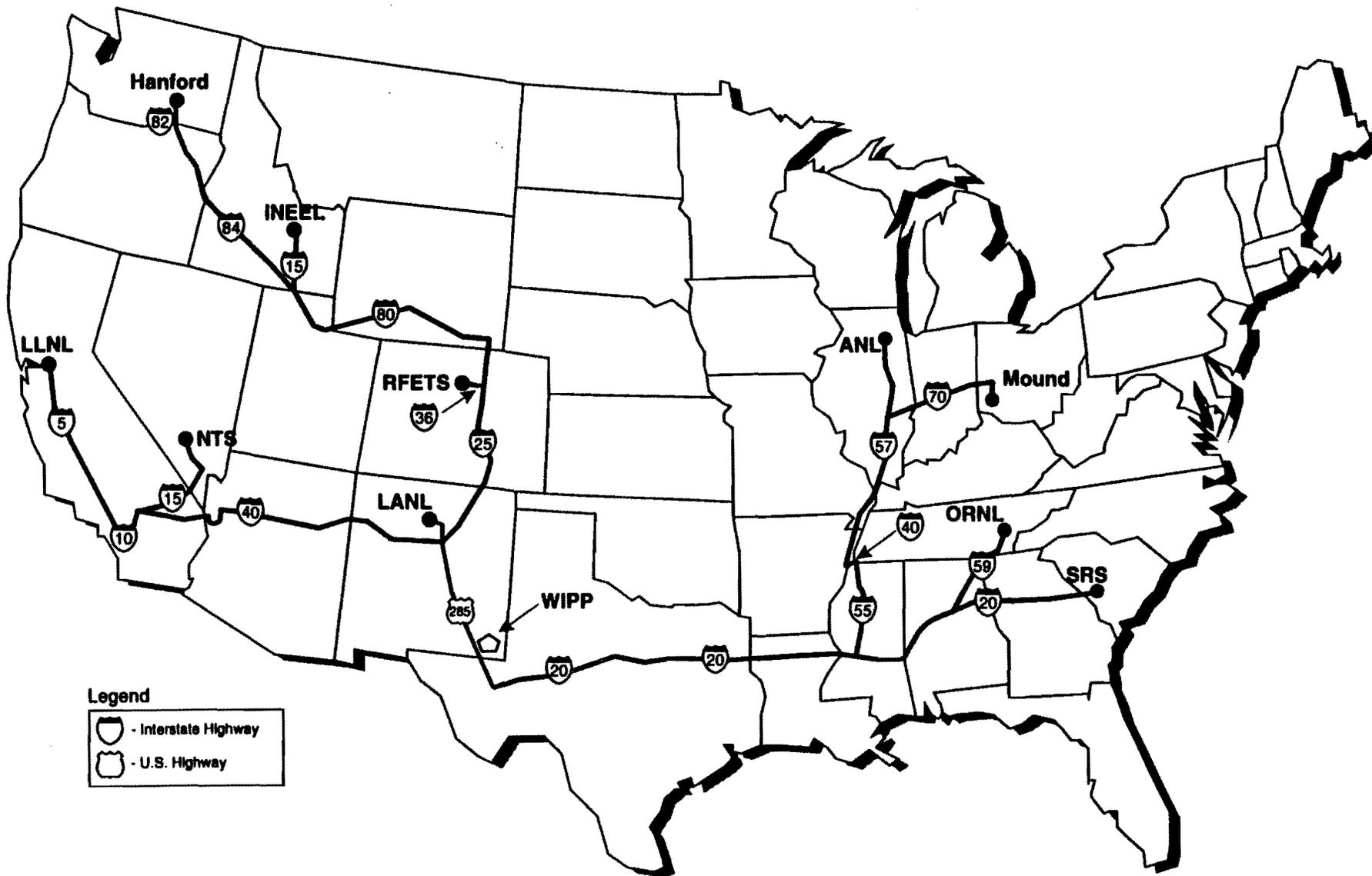
### **Future Rail Option**

The DOE will continue to study the possibility of using regular rail transportation because of its potentially lower cost and risk. However, the DOE considers rail impractical at this time because of:

- The unavailability of rail service with transit times reliable enough to allow the DOE to meet NRC requirements
- Low interest of the rail carriers in handling the regular shipments
- The cost of acquiring additional TRUPACT-II's needed for rail transportation (three times as many TRUPACT-II's would be needed for each shipment) with the cost of acquiring or modifying rail cars

For more information about the WIPP, the Final SEIS-II and related documents, or to be placed on the mailing list, call the WIPP Information Center at 1-800-336-WIPP (9477). You may also visit the National Transuranic Waste Program Home Page at <http://www.wipp.carlsbad.nm.us>. If you prefer, write to:

Ms. Patricia Kilgore  
 U.S. Department of Energy  
 Carlsbad Area Office  
 P.O. Box 3090  
 Carlsbad, New Mexico 88221



**Proposed TRU Waste Truck Transportation Routes from the 10 Major Generator-Storage Sites**